

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
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**PCT**  
11.17.2004

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year)

**6.11.2004**

Applicant's or agent's file reference

**R04153PCT**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/JP2004/011382**

International filing date (day/month/year)

**30.07.2004**

Priority date (day/month/year)

**05.08.2003**

International Patent Classification (IPC) or both national classification and IPC

Int.Cl' **B41J2/01**

Applicant

**RICOH COMPANY, LTD.**

**1. This opinion contains indications relating to the following items:**

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/JP

**Japan Patent Office**

3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan

Authorized officer

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**2P 2907**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

**PCT/JP2004/011382**

**Box No. I Basis of the opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- a sequence listing  
 table(s) related to the sequence listing

b. format of material

- in written format  
 in computer readable form

c. time of filing/furnishing

- contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.

3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
**PCT/JP2004/011382**

**Box No. IV Lack of unity of invention**

1.  In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:
  - paid additional fees
  - paid additional fees under protest
  - not paid additional fees
2.  This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
  - complied with
  - not complied with for the following reasons:

The "special technical features" of claims 1-22 relate to a control of an amount of liquid adhering to a recording paper so as to reduce color difference occurring in the bidirectional recording while the "special technical features" of claims 23-39 relate to a control of amount of liquid adhesion to the recording medium so as to prevent leakage of electric charge from the recording medium. There is no technical relationship among those inventions involving one or more of the same or corresponding technical features. Therefore, these groups of inventions are not so linked as to form a single general inventive concept.
4. Consequently, this opinion has been established in respect of the following parts of the international application:
  - all parts.
  - the parts relating to claims Nos. \_\_\_\_\_.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
**PCT/JP2004/ 011382**

<b>Box No. V</b>	<b>Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</b>		
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**1. Statement**

Novelty (N)	Claims	<u>2, 4-10, 12, 14-20, 22-39</u>	YES
	Claims	<u>1, 3, 11, 13, 21</u>	NO
Inventive step (IS)	Claims	<u>2, 12, 23-39</u>	YES
	Claims	<u>1, 3-11, 13-22</u>	NO
Industrial applicability (IA)	Claims	<u>1-39</u>	YES
	Claims		NO

**2. Citations and explanations**

D1 = JP 11-207999 A(SEIKO EPSON Co., Ltd.) 1999.08.03,[0014]

D2 = JP 2001-270139 A(SEIKO EPSON Co., Ltd.)2001.10.02,[0041]-[0043]

D3 = JP 7-314734 A(CANON Co.,Ltd.)1995.12.05,[0019]

The subject matters of claims 1,3,11,13,21 do not appear to be novel with respect to D1( see [0014]).

The subject matters of claims 4-9,14,15,17-19,22 do not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 2 cited in the same. The technical feature that a controller controls an amount of liquid adhering to a recording paper so as to reduce color difference occurring in the bidirectional recording in D1 and the feature that the controlled gamma value is a product of the ordinary gamma value and a factor  $\alpha$  for

the purpose of control of an amount of liquid adhering to a recording paper in D2 are concerned with mutually related technical fields. Therefore, the skilled person in the art would easily conceive the idea of employing the feature in D1 to substitute the feature disclosed in D2.

The subject matter of claim 10 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 3 cited in the same.

The technical feature that a controller controls an amount of liquid adhering to a recording paper so as to reduce color difference occurring in the bidirectional recording in D1 and the feature that the amount of liquid adhering to the redording paper is reduced when duplexing is performed in D3 are concerned with mutually related technical fields. Therefore, the skilled person in the art would easily conceive the idea of employing the feature in D1 to substitute the feature disclosed in D3.

The subject matters of claims 16,20 do not appear to involve an inventive step in view of the document 1, the document 2 and the document 3.

The subject matters of claims 2,12,23-39 are neither disclosed in any of the documents cited in the ISR nor obvious to a person skilled in the art.